

ABSTRACT OF THE DISCLOSURE

2 According to one embodiment, an integrated circuit (100) includes a programmable
3 portion (102) and a communication portion (104). A programmable portion (102) may
4 include logic circuits that are configurable by a user. A communication portion (104) may
5 include one or more circuit blocks designed to perform predetermined serial data
6 communication functions. According to one embodiment, a communication portion (104)
7 may include a block converter (218) that can encode/decode input data words into output
8 data words, and a scrambler circuit (220) for scrambling/de-scrambling data according to a
9 predetermined scrambling polynomial value. Different scrambling polynomial values may
10 be selected from an operation control store (206) to provide a variety of different
11 scrambling/de-scrambling functions. The inclusion of a communication portion (104) may
12 reduce the size and/or increase the speed of an integrated circuit over conventional
13 approaches that may synthesize serial data communication functions from programmable
14 logic circuits.